

## CLAIMS

What is claimed is:

1. A method for configuring a data processing system that interacts with multiple data sources via a set of respective management agents, comprising:

creating configuration information used for modifying the data processing system;

and

automatically applying the configuration information to modify the data processing system by making a change to the set of management agents.

2. The method according to claim 1, further comprising:

after creating the configuration information, exporting the configuration information to a storage location; and

importing the configuration information from the storage location to the data processing system where it is automatically applied.

3. The method according to claim 1, wherein the configuration information contains a configuration description that is used by the data processing system to add a new management agent to the set of management agents, and the applying modifies the data processing system by adding the new management agent.

4. The method according to claim 1, wherein the configuration information contains a configuration description that is used by the data processing system to update an existing management agent within the set of management agents, and the applying modifies the data processing system by updating the existing management agent.

1  
2 5. The method according to claim 1, wherein the configuration information  
3 contains a configuration description that is used by the data processing system to  
4 configure plural management agents within the set of management agents, and the  
5 applying modifies the data processing system by configuring the plural management  
6 agents.

7  
8 6. The method according to claim 1, wherein data processing system includes a  
9 first rule set for governing the behavior of global aspects of the data processing system,  
10 and a second rule set for governing the behavior of individual management agents in the  
11 set of management agents, and wherein the configuration information contains a first part  
12 that contains a description used for modifying the first rule set and a second part that  
13 contains a description used for modifying the second rule set.

14  
15 7. The method according to claim 1, wherein the data processing system includes  
16 a metadirectory system for managing directories associated with the data sources.

17  
18 8. The method according to claim 7, wherein metadirectory system includes a  
19 core storage area for storing aggregate information collected from plural of the data  
20 sources.

21  
22  
23 9. The method according to claim 8, wherein the metadirectory system includes a  
24 first rule set for governing the behavior of the core storage area, and a second rule set for  
25 governing the behavior of individual management agents in the set of management

1 agents, and wherein the configuration information contains a first part that contains a  
2 description used for modifying the first rule set and a second part that contains a  
3 description used for modifying the second rule set.

4  
5 10. The method according to claim 1, wherein the configuration information is  
6 expressed declaratively using a mark-up language.

7  
8 11. The method according to claim 1, wherein the configuration information  
9 includes a configuration description, and the applying involves comparing the  
10 configuration description with an existing configuration of the data processing system to  
11 provide a comparison result, and modifying the data processing system based on the  
12 comparison result.

13  
14 12. The method according to claim 1, wherein the applying involves matching  
15 partitions specified in the configuration information with partitions associated with an  
16 existing management agent or data source.

17  
18 13. The method according to claim 12, wherein the applying employs different  
19 matching routines for different respective types of management agents.

20  
21 14. The method according to claim 12, where the matching involves:  
22 automatically matching a first set of file-specified partitions with existing  
23 partitions, leaving a second set that are not automatically matched; and  
24  
25

1 manually matching the second set of file-specified partitions with existing  
2 partitions.  
3

4 15. The method according to claim 12, wherein the manual matching provides a  
5 UI presentation to assist the user in performing the manual matching of partitions.  
6

7 16. The method according to claim 1, wherein the data processing system is  
8 employed in a production environment of an organization, and wherein the creating of the  
9 configuration information is performed in a lab system.  
10

11 17. An infrastructure for updating a data processing system that interacts with  
12 multiple data sources via a set of respective management agents, comprising:  
13

14 a lab environment containing a lab system, the lab system including logic  
15 configured to create configuration information used for modifying the data processing  
16 system; and  
17

18 a production environment containing the data processing system, the data  
19 processing system including configuration logic that is configured to automatically apply  
20 the configuration information to modify the data processing system by making a change  
21 to the set of management agents.  
22

23 18. The infrastructure according to claim 17, wherein the lab system further  
24 includes logic configured to export the created configuration information to a storage  
25 location, and the production system further includes logic configured to import the  
configuration information from the storage location to the data processing system.

1  
2 19. The infrastructure according to claim 17, wherein the configuration  
3 information contains a configuration description that is used by the data processing  
4 system to add a new management agent to the set of management agents, and wherein the  
5 configuration logic is configured to modify the data processing system by adding the new  
6 management agent.

7  
8 20. The infrastructure according to claim 17 wherein the configuration  
9 information contains a configuration description that is used by the data processing  
10 system to update an existing management agent within the set of management agents, and  
11 the configuration logic is configured to modify the data processing system by updating  
12 the existing management agent.

13  
14 21. The infrastructure according to claim 17, wherein the configuration  
15 information contains a configuration description that is used by the data processing  
16 system to configure plural management agents within the set of management agents, and  
17 the configuration logic is configured to modify the data processing system by configuring  
18 the plural management agents.

19  
20 22. The infrastructure according to claim 17, wherein data processing system  
21 includes a first rule set for governing the behavior of global aspects of the data processing  
22 system, and a second rule set for governing the behavior of individual management  
23 agents in the set of management agents, and wherein the configuration information  
24  
25

1 contains a first part that contains a description used for modifying the first rule set and a  
2 second part that contains a description used for modifying the second rule set.

3  
4 23. The infrastructure according to claim 17, wherein the data processing system  
5 includes a metadirectory system for managing directories associated with the data  
6 sources.

7  
8 24. The infrastructure according to claim 23, wherein metadirectory system  
9 includes a core storage area for storing aggregate information collected from plural of the  
10 data sources.

11  
12 25. The infrastructure according to claim 24, wherein the metadirectory system  
13 includes a first rule set for governing the behavior of the core storage area, and a second  
14 rule set for governing the behavior of individual management agents in the set of  
15 management agents, and wherein the configuration information contains a first part that  
16 contains a description used for modifying the first rule set and a second part that contains  
17 a description used for modifying the second rule set.

18  
19  
20 26. The infrastructure according to claim 17, wherein the configuration  
21 information is expressed declaratively using a mark-up language.

22  
23 27. The infrastructure according to claim 17, wherein the configuration  
24 information includes a configuration description, and the configuration logic is  
25 configured to compare the configuration description with an existing configuration of the

1 data processing system to provide a comparison result, and modify the data processing  
2 system based on the comparison result.

3  
4 28. The infrastructure according to claim 17, wherein configuration logic is  
5 configured to perform the applying by matching partitions specified in the configuration  
6 information with partitions associated with an existing management agent or data source.

7  
8 29. The infrastructure according to claim 28, wherein the configuration logic is  
9 configured to perform the applying by employing different matching routines for  
10 different respective types of management agents.

11  
12 30. The infrastructure according to claim 29, wherein the configuration logic is  
13 configured to perform the matching by:

14 automatically matching a first set of file-specified partitions with existing  
15 partitions, leaving a second set that are not automatically matched; and

16 manually matching the second set of file-specified partitions with existing  
17 partitions.

18  
19 31. The infrastructure according to claim 30, wherein the configuration logic is  
20 configured to perform the manual matching by providing a UI presentation to assist the  
21 user in performing the manual matching of partitions.

22  
23  
24 32. A method for configuring a data processing system, comprising:  
25

1 importing the configuration information to the data processing system, wherein  
2 the configuration information includes a configuration description; and  
3 applying the configuration information to the data processing system by  
4 comparing the configuration description with an existing configuration of the data  
5 processing system to provide a comparison result, and modifying the data processing  
6 system based on the comparison result.

7  
8 33. An apparatus comprising:

9 configuration logic configured to:

10 import configuration information to a data processing system, wherein the  
11 configuration information includes a configuration description; and  
12 apply the configuration information to the data processing system by  
13 comparing the configuration description with an existing configuration of the data  
14 processing system to provide a comparison result, and modifying the data  
15 processing system based on the comparison result.

16  
17 34. A computer readable medium containing machine readable instructions used  
18 to configure a data processing system when implemented by a processing apparatus,  
19 comprising:

20 configuration logic configured to:

21 import configuration information to the data processing system, wherein  
22 the configuration information includes a configuration description; and  
23 apply the configuration information to modify the data processing system  
24 by comparing the configuration description with an existing configuration of the  
25



1 data processing system to provide a comparison result, and modifying the data  
2 processing system based on the comparison result.

3  
4 35. A computer readable medium containing configuration information expressed  
5 using a mark-up language data structure, the configuration information governing the  
6 operation of a metadirectory system that includes a core storage area and at least one  
7 management agent for interacting with a data source, the data structure comprising:

8 first data expressed in the mark-up language that specifies a description for  
9 configuring the core storage area; and

10 second data expressed in the mark-up language that specifies a description for  
11 configuring the at least one management agent.